



## SEQUENCE LISTING

&lt;110&gt; MARTIN &amp; TEODORO

&lt;120&gt; SOMATIC TRANSFER OF MODIFIED GENES TO PREDICT DRUG EFFECTS

&lt;130&gt; 47728(1699)

&lt;140&gt; 09/187,669

&lt;141&gt; 1998-11-05

&lt;150&gt; 60/064,893

&lt;151&gt; 1997-11-07

&lt;160&gt; 2

&lt;170&gt; PatentIn Ver. 2.1

&lt;210&gt; 1

&lt;211&gt; 630

&lt;212&gt; PRT

&lt;213&gt; Unknown Organism

&lt;220&gt;

&lt;223&gt; Description of Unknown Organism: Mammalian ion channel protein

&lt;400&gt; 1

Met Ala Ala Gly Val Ala Ala Trp Leu Pro Phe Ala Arg Ala Ala Ala  
1 5 10 15

Ile Gly Trp Met Pro Val Ala Ser Gly Pro Met Pro Ala Pro Pro Arg  
20 25 30

Gln Glu Arg Lys Arg Thr Gln Asp Ala Leu Ile Val Leu Asn Val Ser  
35 40 45

Gly Thr Arg Phe Gln Thr Trp Gln Asp Thr Leu Glu Arg Tyr Pro Asp  
50 55 60

Thr Leu Leu Gly Ser Ser Glu Arg Asp Phe Phe Tyr His Pro Glu Thr  
65 70 75 80

Gln Gln Tyr Phe Phe Asp Arg Asp Pro Asp Ile Phe Arg His Ile Leu  
85 90 95

Asn Phe Tyr Arg Thr Gly Lys Leu His Tyr Pro Arg His Glu Cys Ile  
100 105 110

Ser Ala Tyr Asp Glu Glu Leu Ala Phe Phe Gly Leu Ile Pro Glu Ile  
115 120 125

Ile Gly Asp Cys Cys Tyr Glu Glu Tyr Lys Asp Arg Arg Arg Glu Asn  
130 135 140

Ala Glu Arg Leu Gln Asp Asp Ala Asp Thr Asp Asn Thr Gly Glu Ser  
145 150 155 160

Ala Leu Pro Thr Met Thr Ala Arg Gln Arg Val Trp Arg Ala Phe Glu  
 165 170 175  
 Asn Pro His Thr Ser Thr Met Ala Leu Val Phe Tyr Tyr Val Thr Gly  
 180 185 190  
 Phe Phe Ile Ala Val Ser Val Ile Ala Asn Val Val Glu Thr Val Pro  
 195 200 205  
 Cys Gly Ser Ser Pro Gly His Ile Lys Glu Leu Pro Cys Gly Glu Arg  
 210 215 220  
 Tyr Ala Val Ala Phe Phe Cys Leu Asp Thr Ala Cys Val Met Ile Phe  
 225 230 235 240  
 Thr Val Glu Tyr Leu Leu Arg Leu Ala Ala Ala Pro Ser Arg Tyr Arg  
 245 250 255  
 Phe Val Arg Ser Val Met Ser Ile Ile Asp Val Val Ala Ile Leu Pro  
 260 265 270  
 Tyr Tyr Ile Gly Leu Val Met Thr Asp Asn Glu Asp Val Ser Gly Ala  
 275 280 285  
 Phe Val Thr Leu Arg Val Phe Arg Val Phe Arg Ile Phe Lys Phe Ser  
 290 295 300  
 Arg His Ser Gly Gly Leu Arg Ile Leu Gly Tyr Thr Leu Lys Ser Cys  
 305 310 315 320  
 Ala Ser Glu Leu Gly Phe Leu Leu Phe Ser Leu Thr Met Ala Ile Ile  
 325 330 335  
 Ile Phe Ala Thr Val Met Phe Tyr Ala Glu Lys Gly Ser Ser Ala Ser  
 340 345 350  
 Lys Phe Thr Ser Ile Pro Ala Ala Phe Trp Tyr Thr Ile Val Thr Met  
 355 360 365  
 Thr Thr Leu Gly Tyr Gly Asp Met Val Pro Lys Thr Ile Ala Gly Lys  
 370 375 380  
 Ile Phe Gly Ser Ile Cys Ser Leu Ser Gly Val Leu Val Ile Ala Leu  
 385 390 395 400  
 Pro Val Pro Val Ile Val Ser Asn Phe Ser Arg Ile Tyr His Gln Asn  
 405 410 415  
 Gln Arg Ala Asp Lys Arg Arg Ala Gln Lys Lys Ala Arg Leu Ala Arg  
 420 425 430  
 Ile Arg Ala Ala Lys Ser Gly Ser Ala Asn Ala Tyr Met Gln Ser Lys  
 435 440 445  
 Arg Asn Gly Leu Leu Ser Asn Gln Leu Gln Ser Ser Glu Asp Glu Pro  
 450 455 460

Ala Phe Val Ser Lys Ser Gly Ser Ser Phe Glu Thr Gln His His His  
 465 470 475 480  
 Leu Leu His Cys Leu Glu Lys Thr Thr Asn His Glu Phe Val Asp Glu  
 485 490 495  
 Gln Val Phe Glu Glu Ser Cys Met Glu Val Ala Thr Val Asn Arg Pro  
 500 505 510  
 Ser Ser His Ser Pro Ser Leu Ser Ser Gln Gln Gly Val Thr Ser Thr  
 515 520 525  
 Cys Cys Ser Arg Arg His Lys Lys Thr Phe Arg Ile Pro Asn Ala Asn  
 530 535 540  
 Val Ser Gly Ser His Arg Gly Ser Val Gln Glu Leu Ser Thr Ile Gln  
 545 550 555 560  
 Ile Arg Cys Val Glu Arg Thr Pro Leu Ser Asn Ser Arg Ser Ser Leu  
 565 570 575  
 Asn Ala Lys Met Glu Glu Cys Val Lys Leu Asn Cys Glu Gln Pro Tyr  
 580 585 590  
 Val Thr Thr Ala Ile Ile Ser Ile Pro Thr Pro Pro Val Thr Thr Pro  
 595 600 605  
 Glu Gly Asp Asp Arg Pro Glu Ser Pro Glu Tyr Ser Gly Gly Asn Ile  
 610 615 620  
 Val Arg Val Ser Ala Leu  
 625 630

<210> 2  
 <211> 214  
 <212> PRT  
 <213> Unknown Organism

<220>  
 <223> Description of Unknown Organism: Mammalian ion  
 channel protein

<400> 2  
 Met Ala Ala Gly Val Ala Ala Trp Leu Pro Phe Ala Arg Ala Ala Ala  
 1 5 10 15  
 Ile Gly Trp Met Pro Val Ala Ser Gly Pro Met Pro Ala Pro Pro Arg  
 20 25 30  
 Gln Glu Arg Lys Arg Thr Gln Asp Ala Leu Ile Val Leu Asn Val Ser  
 35 40 45  
 Gly Thr Arg Phe Gln Thr Trp Gln Asp Thr Leu Glu Arg Tyr Pro Asp  
 50 55 60  
 Thr Leu Leu Gly Ser Ser Glu Arg Asp Phe Phe Tyr His Pro Glu Thr  
 65 70 75 80

[illegible]